

## TANGIBLE RESULT #10

# Facilitate Economic Opportunity in Maryland



Maryland's transportation system is essential to the State's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national and global marketplace. Transportation directly impacts the viability of a region as a place where people want to live, work and raise families, and is critical to attracting a competent workforce.

### RESULT DRIVER:

Jim Dwyer

*Maryland Port Administration (MPA)*

# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Eric Beckett  
*State Highway Administration (SHA)*

## PURPOSE OF MEASURE:

To track direct, indirect and induced jobs generated by annual construction investments as an indicator of transportation projects contribution to economic return.

## FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY:

MDOT compiles the necessary data through the annual CTP process.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.1

### Economic Return from Transportation Investment

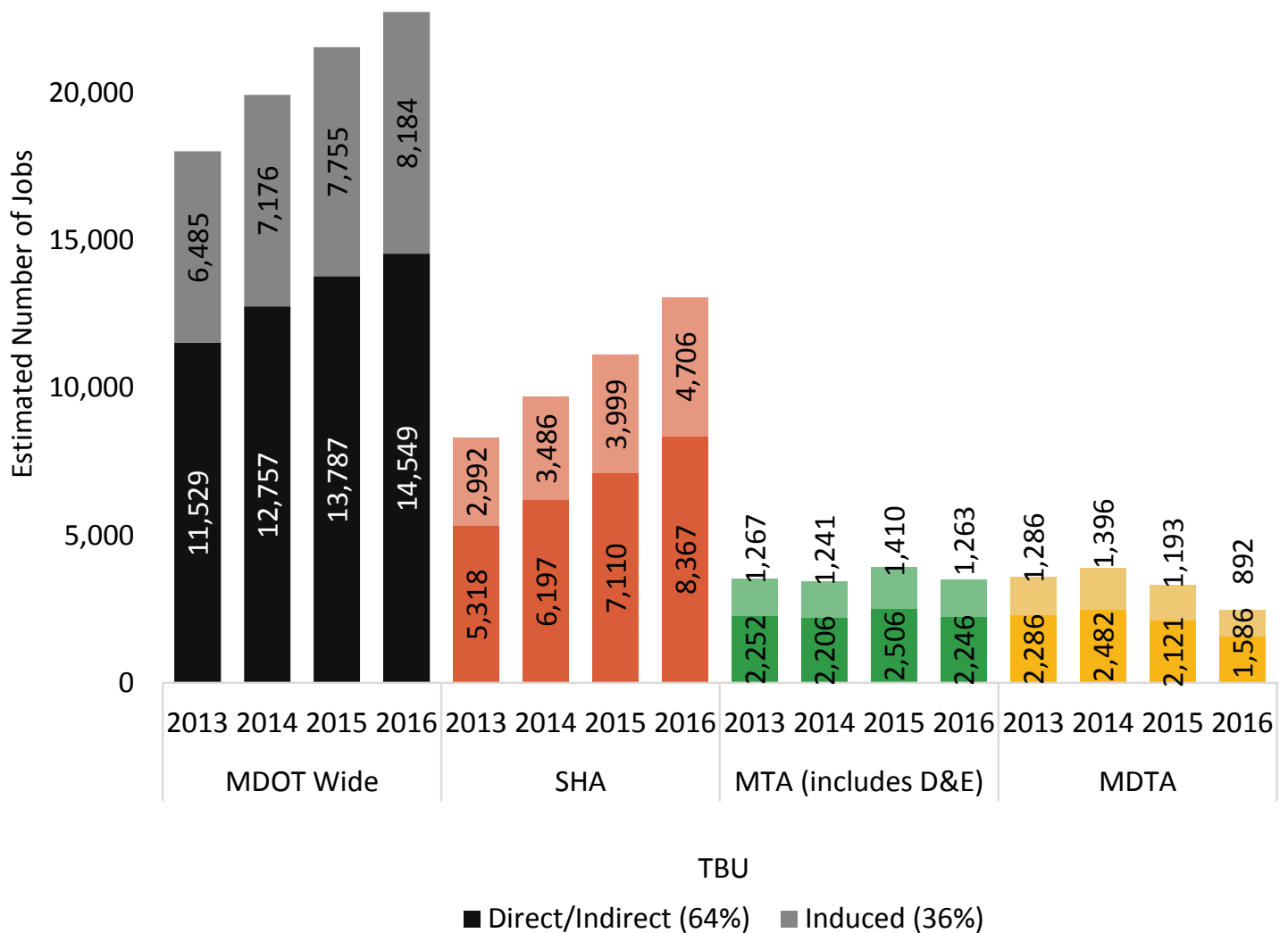
Construction spending on transportation projects has a significant economic impact on people and businesses throughout the State. Economic return from transportation investment is based on the estimated number of jobs created as a result of MDOT investments in capital projects. In FY2016, it is estimated that over 22,500 jobs were created by MDOT. The annual CTP is used to identify planned investments by each MDOT TBU on major construction projects. Construction projects generate three types of jobs: direct jobs are those generated by the actual construction activity; indirect jobs are supported by the business purchases necessary for the project's construction; and induced jobs are a result of local purchases of goods and services by the direct employees. Capital investments in transportation infrastructure support economic activity across a wider region, beyond the specific project location.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.1

### Economic Return from Transportation Investment

Chart 10.1.2: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013-FY2016

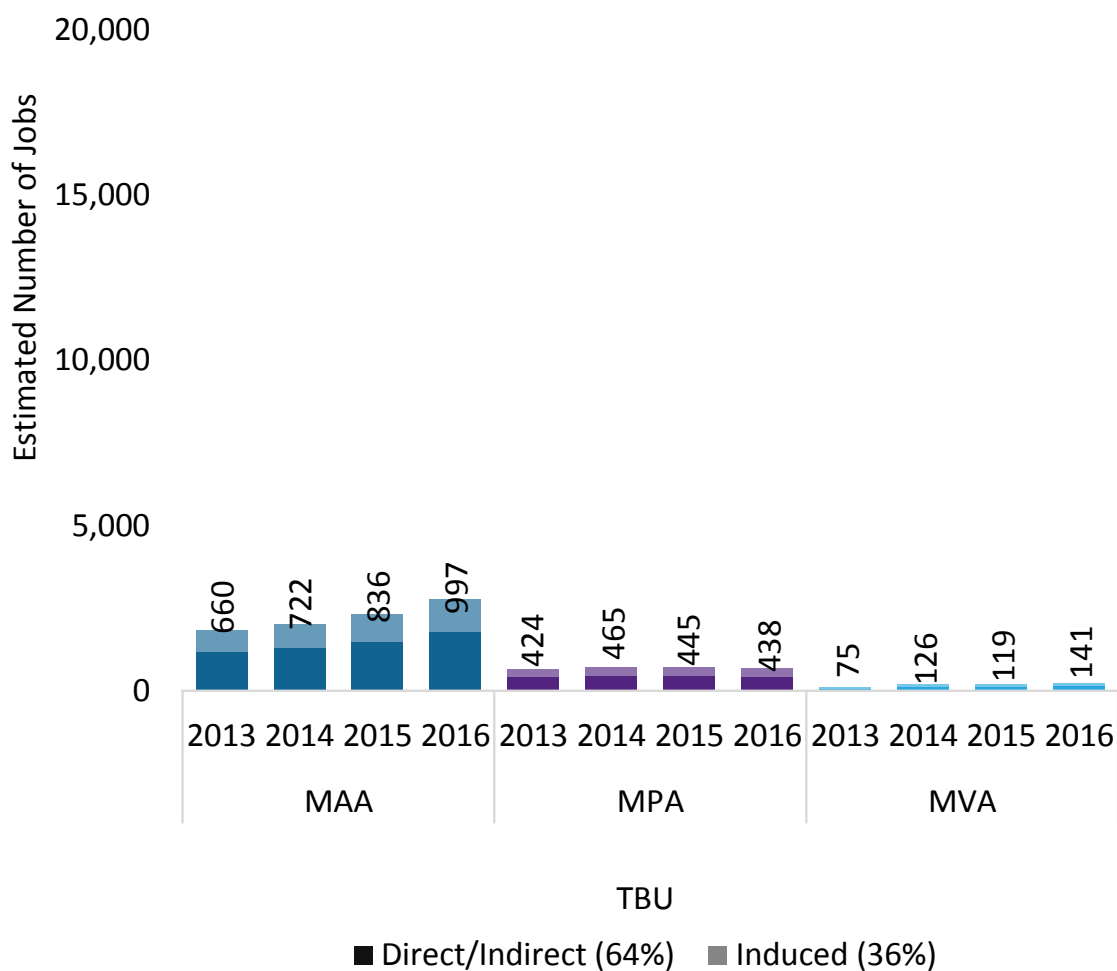


# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.1

### Economic Return from Transportation Investment

Chart 10.1.2: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013-FY2016



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Nicole Katsikides  
*State Highway Administration (SHA)*

## PURPOSE OF MEASURE:

To compare Maryland against other states' economic activity based on access to and condition of the infrastructure.

## FREQUENCY:

Annually (in October)

## DATA COLLECTION METHODOLOGY:

Using publicly available data, CNBC assesses every states' infrastructure including value of goods movement; availability of air travel; road and bridge conditions; and commute times.

## NATIONAL BENCHMARK:

CNBC annual ranking

Source: <https://www.cnbc.com/2017/07/11/top-states-for-business-25-maryland.html>

## PERFORMANCE MEASURE 10.2

### Maryland's Ranking in National Transportation Infrastructure Assessment

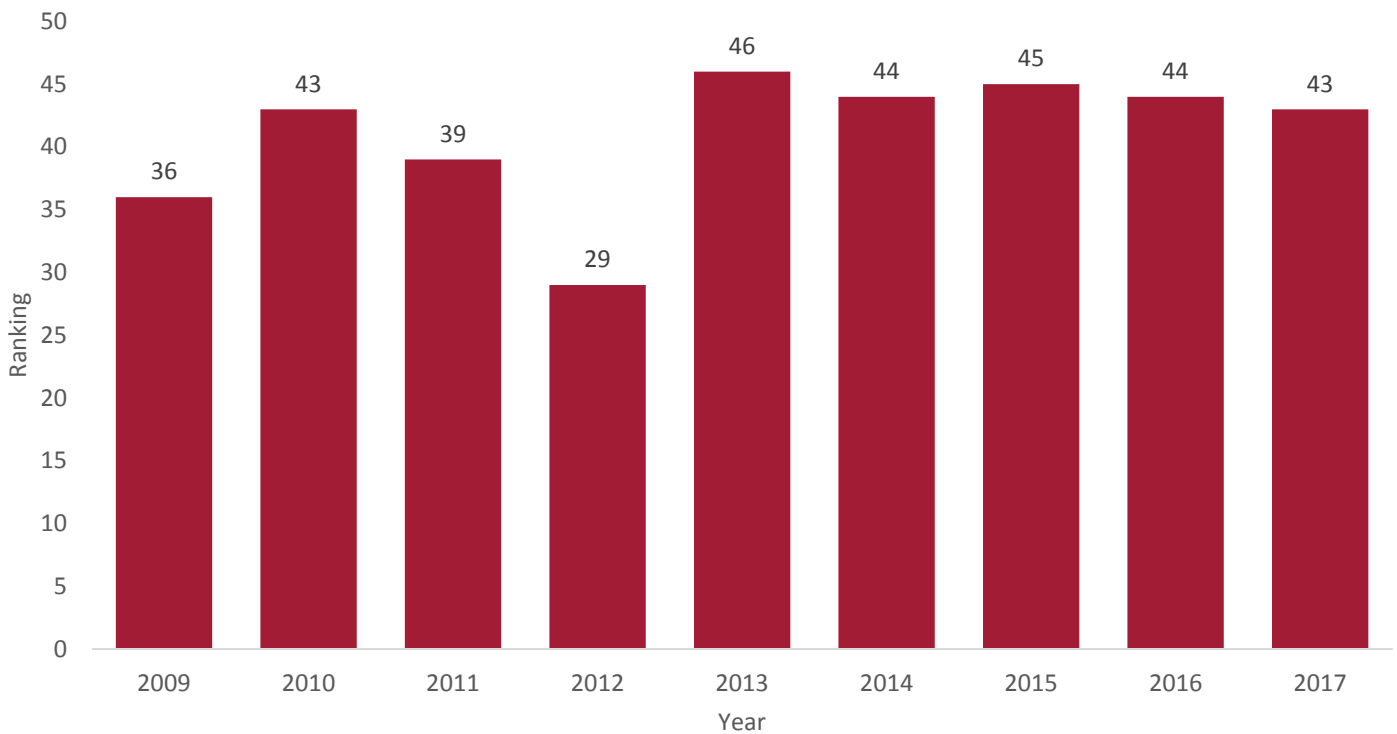
The CNBC business news media group uses publicly available data on 60 measures of competitiveness to score each state. The metrics are organized into ten broad categories and weighted based on how frequently each is used as a selling point in state economic development marketing materials. The infrastructure category is a measure of a state's transportation system and supply of safe drinking water. It includes metrics to compare the value of goods shipped by air, waterways, roads and rail within a state, the quality of roads and bridges, and commute times. The annual rankings can be used as a national benchmark for infrastructure conditions over time as a means of comparing Maryland's standing versus other states. For 2017, Maryland is ranked 43rd, which is a three-point improvement since 2013. Maryland ranks in the bottom ten because of the mobility/congestion components used to compute the infrastructure metric.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.2

### Maryland's Ranking in National Transportation Infrastructure Assessment

Chart 10.2.1: America's Top States for Business Annual Rankings for Maryland in Infrastructure CY2008-CY2017



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer

*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Juan Torrico

*Maryland Transit Administration (MTA)*

## PURPOSE OF MEASURE:

To assess freight mobility and the amount and value of freight originating and terminating in Maryland as an indicator of how supportive transportation infrastructure is for freight and Maryland's economy.

## FREQUENCY:

Annually (in April)

## DATA COLLECTION METHODOLOGY:

U.S. Department of Transportation Freight Analysis Framework (FAF4) Version 4 and MPA.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.3A

### Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Efficient and interconnected multimodal freight movement is essential to the State's economy because freight is the economy-in-motion. Maryland manufacturers depend on the freight system to move raw materials and finished goods between production facilities, distribution centers and retail outlets in Maryland and throughout the U.S. and the world. Freight-dependent industries account for over one million jobs in Maryland.

- Water and rail are well-suited to cost-effectively haul goods long distances. Commercial ships utilize the Port of Baltimore to transfer waterborne goods to land, at which point trucks and rail haul these imported goods to communities around the nation.
- Trucks carry nearly every type of commodity from consumer products to chemicals to machinery.
- High value and time-sensitive products are commonly shipped via air. The top air freight commodities shipped out of MAA facilities include mail, machinery and transportation equipment.

MDOT is currently updating the Strategic Goods Movement Plan to address the latest Fixing America's Surface Transportation (FAST) Act requirements.



# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.3A

### Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Chart 10.3A: Freight Analysis Framework (FAF) Tonnage and Value of Freight

METHOD FOR MOVING FREIGHT	TOTAL VALUE (MILLIONS)	TOTAL TONNAGE (THOUSANDS)
Air*	\$13,379	141
Pipeline & Other**	\$72,539	39,488
Rail*	\$15,063	26,206
Truck*	\$318,074	214,317
Water***	\$49,915	31,834
All Freight	\$468,970	311,986

\*Source: U.S. Department of Transportation Freight Analysis Framework (FAF4). Other, Multiple Modes and Mail, Rail, and Truck value and tonnage data is estimated based on FAF4 data. The data is based off of 2012 actual data collected by FHWA and is factored by FHWA through 2015. MDOT adjusts the yearly by a 2% annual growth rate that reflects a conservative estimate of domestic and international freight growth given current economic conditions.

\*\*Pipeline and Other freight consists largely pipeline, postal and courier shipments weighing less than 100 pounds and other intermodal combinations. Represents a combination of FAF4 Pipeline, Other and Unknown and Multiple Modes and Mail categories.

\*\*\* International cargo through the Port of Baltimore in 2016, source: MPA.

Data for air, rail and truck is adjusted yearly to account for 2016 FHWA FAF data (based on 2012 actual data and FHWA adjustments) and a 2% annual growth rate.



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Juan Torrico  
*Maryland Transit Administration (MTA)*

## PURPOSE OF MEASURE:

To track public and private international waterborne cargo activity in the Port of Baltimore, which is a strong indicator of jobs generated and economic activity.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

U.S. Census data via website – USA Trade Online.

## NATIONAL BENCHMARK:

Mid-Atlantic ports' international cargo.

## PERFORMANCE MEASURE 10.3B

### Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Cargo through the Port of Baltimore is an indicator of the region's commercial health, because freight is the economy in motion; if freight is not moving, then neither is the economy. International tonnage in Baltimore increased 25 percent in the 2nd quarter due to strong export coal and container volumes. The Port's general cargo was up 7.9 percent in the 2nd quarter, and bulk commodities were up 35 percent.

Baltimore's international cargo tonnage increased two million tons in the 2nd quarter compared to the same period of the prior year, and market share increased by two percentage points for the Mid-Atlantic ports.

The Maryland Port Administration is an active partner with the Corps of Engineers to ensure the navigation channels are dredged to allow the world's fleets easy access to the port.

In the Mid-Atlantic region, the Port of Baltimore ranks:

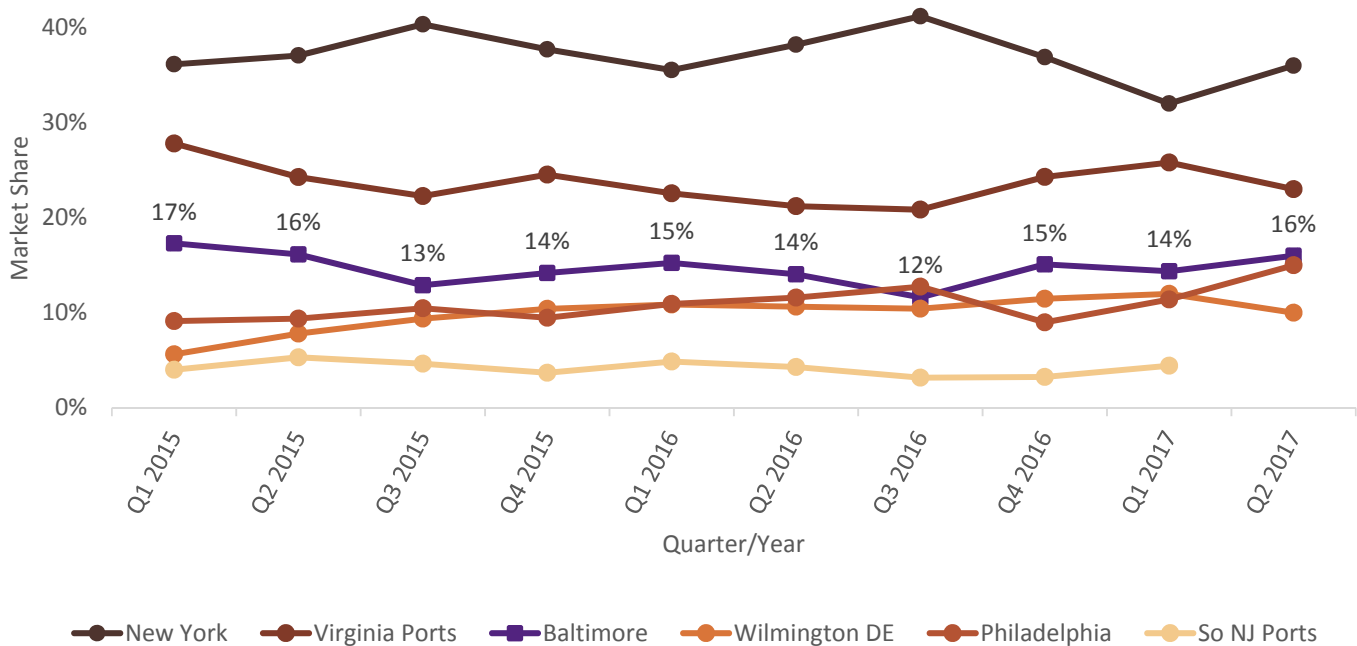
- 1st in Autos and Roll-on/Roll-off (Ro/Ro) heavy equipment
- 1st in imported sugar
- 2nd in imported forest products
- 2nd in exported coal
- 3rd in containers
- 3rd in total international cargo

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.3B

### Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Chart 10.3B.1: Market Share, Mid-Atlantic Ports International Waterborne Cargo Q1 FY2015 - Q2 FY2017



Note: So. NJ Ports' data for Q2 2017 could not be separated from Philadelphia's data.

# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Deb Rogers  
*Maryland Vehicle Administration (MVA)*

## PURPOSE OF MEASURE:

Data shows level of activity at Public Marine Terminals.

## FREQUENCY:

Monthly

## DATA COLLECTION METHODOLOGY:

Data obtained from MPA cargo billing reporting and statistical system (BRASS). Historical data are available to 1998.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including the following strategic commodities: Containers, Autos, Ro/Ro and Imported Forest Products

As a rule of thumb, general cargo generates more jobs per ton than bulk commodities. Although international general cargo is one-third of the Port's total tonnage, it accounts for 96 percent of the Port's cargo value, and the State's public terminals handle the clear majority of general cargo. Therefore, it is an important measure to track. Plus, freight is the economy in motion and marine terminals are a hive of activity which generates jobs.

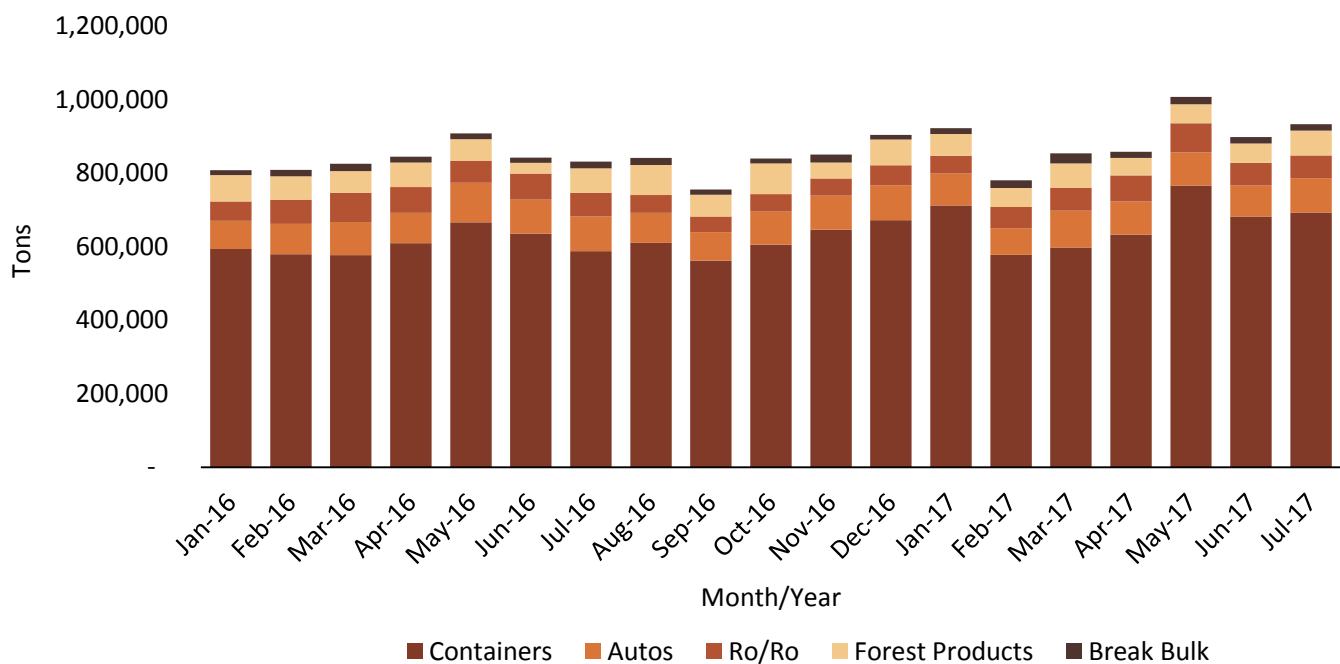
Although the MPA set a record of 10.1 million tons in 2016, the Port's public terminals continue the record breaking trend in 2017, i.e., January set a new all-time monthly high, which was beaten in May; the second quarter was 6.5 percent higher than prior second quarter; and the first seven months of 2017 are 6.6 percent higher than the same period of the prior year. Containers showed the strongest growth. Although low commodity prices on both agricultural products and minerals keep sales of farm, construction and mining equipment suppressed and the strong US dollar discourages exports, Baltimore remains the top Ro/Ro port on the East Coast.

MPA conducts a multi-pronged effort to sustain and expand cargo volumes, e.g., emphasizing long term contracts with favorable rates; marketing for the whole Port; facilitating ways to improve efficiency at Seagirt Marine Terminal to increase truck productivity; managing the capital program to focus on system preservation to keep current customers; and enhancements to keep pace with the evolving global logistics and ever increasing fleet size and vessel sharing agreements.

## PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including the following strategic commodities: Containers, Autos, Ro/Ro and Imported Forest Products

Chart 10.3C.1: MPA General Cargo Tonnage January 2016-July 2017



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Rafael Espinoza  
*Maryland Transportation Authority (MDTA)*

## PURPOSE OF MEASURE:

To minimize the number of weight-posted bridges to facilitate the improvement in movement of goods to businesses, communities and the economy.

## FREQUENCY:

Annually (in July)

## DATA COLLECTION METHODOLOGY:

Data reflects federal reporting in April of each year. The number of bridges on the State-owned system that are weight-posted are reported in the Structure Inventory and Appraisal (SI&A) report. That number is then divided by the total number of SHA and MDTA bridges, resulting in the calculation of the percentage of weight-posted bridges on the State system.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.4

### Number and Percentage of Bridges on the State-Owned System that are Weight-Posted

Weight-posted bridges are those that are unable to safely carry the maximum weight of a legally loaded vehicle (80,000 lbs. for tractor trailers and 70,000 lbs. for dump trucks). Weight-posted bridges adversely affect movement of goods for businesses and communities, and can impact daily commercial operations and business growth. Allowing all legally-loaded vehicles to traverse the bridges on the State system is essential to commerce in Maryland, facilitating the movement of goods and provision of services efficiently throughout the State. Minimizing weight-posted bridges ensures the safety of the traveling public and facilitates emergency response time by avoiding the need for detour routes. If a bridge cannot safely carry all legal loads, due to its present condition or original design criteria, it will be evaluated and a vehicle weight will be established that it can safely carry. This lower vehicle weight (which is less than the legal weight) will be placed on signs alerting all potential users of the maximum load that the bridge should carry.

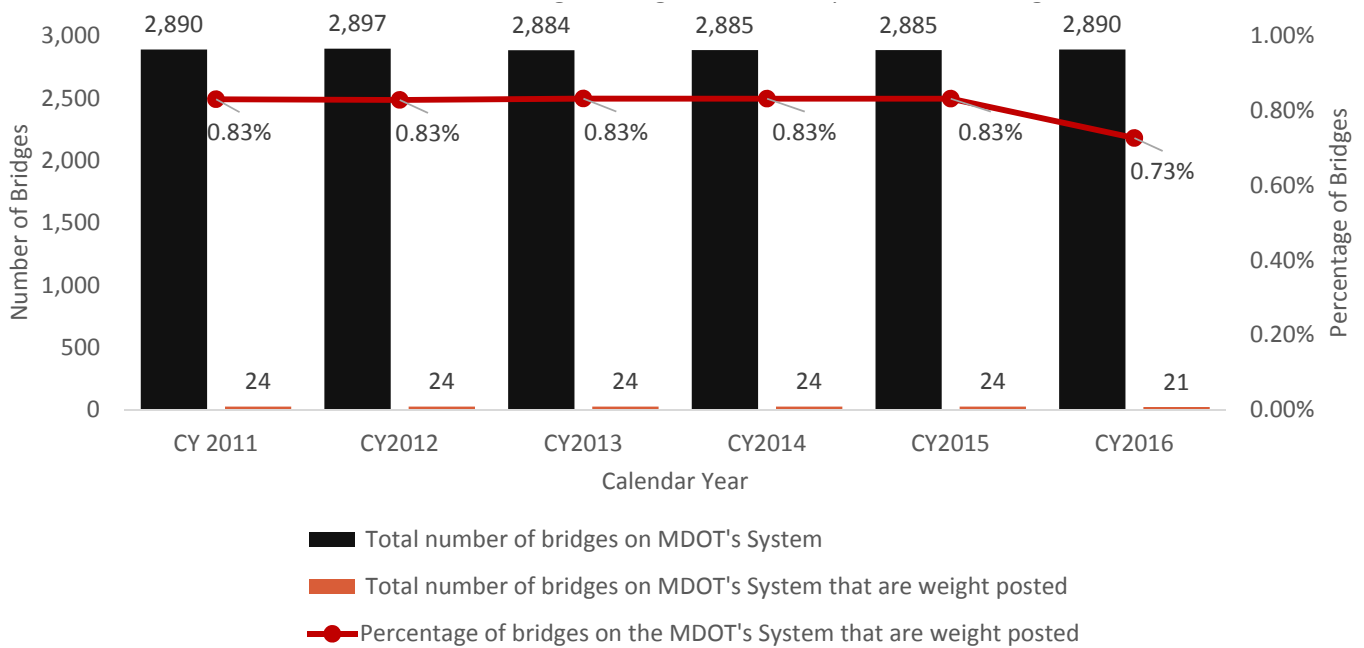
Whenever inspections of weight-posted bridges or structurally deficient bridges indicate that repairs are necessary to prevent a weight posting or the lowering of the existing allowable weight restriction, the work to prevent this will be given top priority, and where possible, complete actual construction 18 months from the date when the need for the work was established.

Less than 1 percent of SHA and MDTA bridges have a weight restriction.

## PERFORMANCE MEASURE 10.4

### Number and Percentage of Bridges on the State-Owned System that are Weight-Posted

Chart 10.4.1 Number & Percentage of Bridges on MDOT's System that are Weight-Posted CY2011-CY2016



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Corey Stottlemeyer  
*The Secretary's Office (TSO)*

## PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the state's economy due to completed transportation projects providing businesses with access to labor, customers, and suppliers. Improved access leads to greater opportunities.

## FREQUENCY:

Annually

## DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model, which is a multimodal measure.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.5

### Change in Market Access due to Improvements in the Transportation Network

Improving access within Maryland's transportation network is a critical role MDOT plays in facilitating economic opportunity for the citizens of Maryland, its businesses and those who come to the State to do business. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on market access. This measure would allow MDOT to look at how improvements in roads and multimodal access is affecting Maryland's economy and assess whether businesses have better access to labor, customers, suppliers and international markets.

This measure includes potential impacts from:

- Business Relocation – Improved market access has the effect of strengthening an economy's competitiveness in attracting and retaining business relative to other locations.
- Productivity Growth – Increasing an economy's accessibility and connectivity generates agglomeration benefits from returns to scale in production, knowledge spillovers, and better matching of suppliers and employees to businesses.
- Increased Import/Export Activity – Improving an economy's access to international gateways can enable new import/export activity.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the market access has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Corey Stottlemeyer  
*The Secretary's Office (TSO)*

## PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the productivity of people and businesses in Maryland.

## FREQUENCY:

Annually

## DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.6

### Change in Productivity due to Improvements in the Transportation Network

Productivity gains are essential to economic growth as businesses and people have to do more with fewer resources. The transportation network is similar to the Internet and other innovations that allow people and businesses to be more productive. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on productivity.

Using a transportation economic impact model, MDOT will be able to assess four types of productivity benefits to ensure it helps facilitate business opportunities throughout Maryland:

1. Travel cost savings;
2. Reliability benefits for industry;
3. Delivery logistics and supply chain benefits; and
4. Agglomeration effects on access to specialized skills and services.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the productivity has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.

# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Eric Beckett  
*State Highway Administration (SHA)*

## PURPOSE OF MEASURE:

To estimate benefits to highway users due to CHART incident management, major/minor capital improvements, signal retiming, HOV lane, and park-and-ride operations as an indicator of cost savings due to reduced delay.

## FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY:

MDOT collects and maintains data on travel speeds, traffic volumes, incidents, and facility usage to develop user cost savings.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.7

### Total User Cost Savings for the Traveling Public due to Congestion Management

The SHA and MDTA implement various projects, programs and policies to reduce congestion and enhance mobility on their facilities. The SHA focuses on both recurrent and non-recurrent aspects of congestion. These include CHART, Incident Management and Intelligent Transportation Systems (ITS) programs, major/minor roadway geometric improvements, traffic signal system optimization, and multimodal strategies like HOV lane operations and park-and-ride facilities. The congestion management solutions implemented by SHA and MDTA result in significant user cost savings (e.g. delay reduction, fuel savings) to automobile and truck traffic. MDOT continues to implement operational strategies, including a Transportation Systems Management and Operations (TSM&O) Strategic Plan, and provides Traffic Incident Management training to partner organizations, while also exploring local, regional and State incident management coordination opportunities. Reductions in travel times directly result in roadway user cost savings.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.7

### Total User Cost Savings for the Traveling Public due to Congestion Management

Chart 10.7.1: Annual User Cost Savings Through MDOT Congestion Management Efforts CY2011-CY2015



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Eric Beckett  
*State Highway Administration (SHA)*

## PURPOSE OF MEASURE:

To quantify the degree of congestion experienced by highway users when traveling during peak hours.

## FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY:

Includes private sector vehicle probe speed data, and traffic count data on average weekdays.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.8

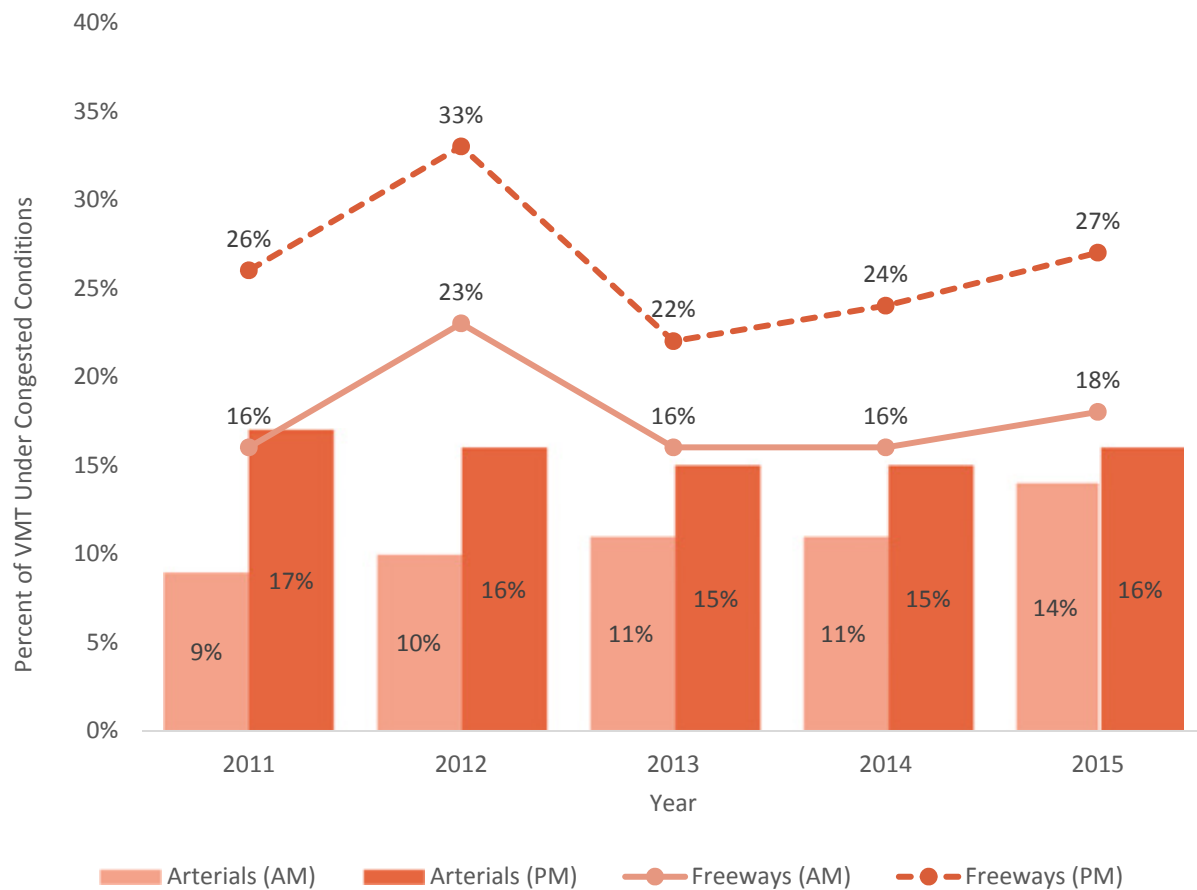
### Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

This measure represents the percentage of peak hour VMT on Maryland highways that occur in congested conditions. Congestion on freeways is said to occur when the travel time index (TTI) ratio is greater than 1.3 (traffic travels at 25 percent slower than the free flow speed). Congestion on arterials is said to occur when the traffic Level of Service (LOS) is rated E, or worse, on a scale of A through F. These congestion metrics are a good indicator of customer experience on roadways in morning and evening peak hours. The share of VMT on the freeways/expressways which occurred in congested conditions is generally higher than the share for arterial roadways. Peak hour congestion is dominated by non-discretionary trips including goods movement, commute and school trips. Reducing congestion and enhancing the reliability of peak hour trips make Maryland more attractive for economic development and provide users with a high quality safe, efficient and reliable highway system.

## PERFORMANCE MEASURE 10.8

Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

Chart 10.8.1: Peak Hour Congested VMT Trends CY2011-CY2015



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Jack Cahalan  
*Maryland Aviation Administration (MAA)*

## PURPOSE OF MEASURE:

To demonstrate Martin State Airport's share of the general aviation business in the Baltimore region.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Operations Network Data compiled by the Federal Aviation Administration.

## NATIONAL BENCHMARK:

General aviation activity at BWI Marshall's general aviation facility.

## PERFORMANCE MEASURE 10.9A

### Market Share: Martin State Airport's Regional Market Share

Martin State Airport is a general aviation facility located in eastern Baltimore County, Maryland serving the general aviation needs of the Baltimore region. It is owned and operated by the State of Maryland. This performance measure gauges the percentage of itinerant general aviation activity at Martin State Airport as compared to the itinerant general aviation activity at BWI Marshall. Itinerant general aviation activity is defined as a flight where its origin or destination takes it beyond the electronic control of the local control tower. This measure captures the amount of discretionary use of Martin State Airport by the business and general aviation community flying in and out of the Baltimore region.

The volume of itinerant general aviation operations is an indicator of how much business traffic Martin State Airport is, or is not, attracting. The more itinerant operations, the more in potential fuel sales and other support operations occur at Martin State Airport. Such operations generate revenue and support existing jobs at, and around, the airport. Strong market share also indicates Martin State is adequately performing one of its primary missions, serving as a "reliever airport" for BWI Marshall. A reliever airport is one that attracts general aviation traffic away from a region's primary commercial airport, reducing demand on the congested airspace surrounding the commercial airport.

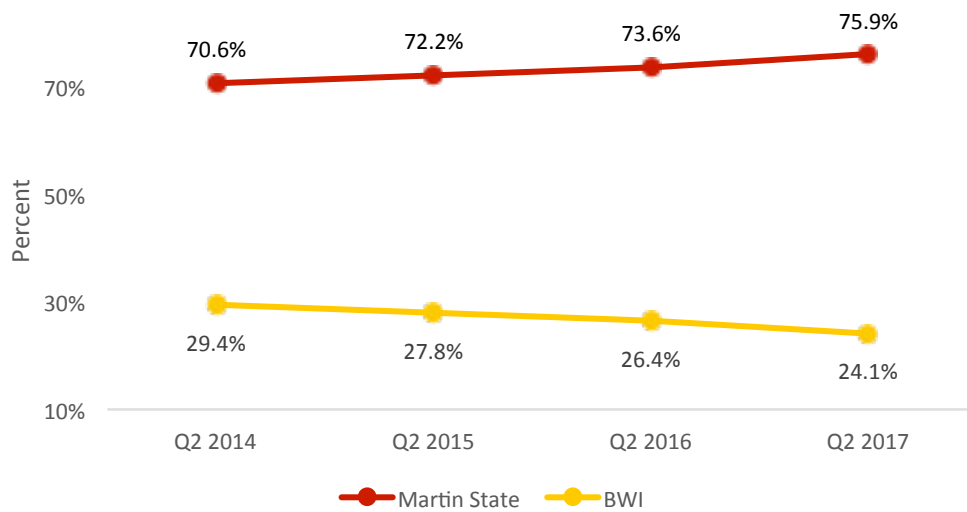
Martin State Airport is performing well. From Q4 2014 through Q4 2016, Martin State demonstrated strong growth in market share of itinerant general aviation operations, increasing from 70 percent to 76 percent while general aviation activity at BWI Marshall declined from 29 percent to 23 percent.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.9A

### Market Share: Martin State Airport's Regional Market Share

Chart 10.9A.1: Percent of all General Aviation Operations other than Local Operations Q2 CY2014-CY2017





# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Jack Cahalan  
*Maryland Aviation Administration (MAA)*

## PURPOSE OF MEASURE:

To demonstrate the percent of scheduled nonstop destinations served by BWI Marshall against the total number of nonstop destinations served by the region's three major airports.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Air service schedule analysis.

## NATIONAL BENCHMARK:

Reagan National Airport; Dulles International Airport.

## PERFORMANCE MEASURE 10.9B

### Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 25 million passengers flew through BWI Marshall Airport in 2016, an all-time-record for passenger traffic. In fact, BWI Marshall has posted 18-straight monthly passenger records through December 2016. International passenger traffic reached 1,233,466 million passengers in 2016, also a new record, and 2016 was the second-straight year with more than one million international passengers.

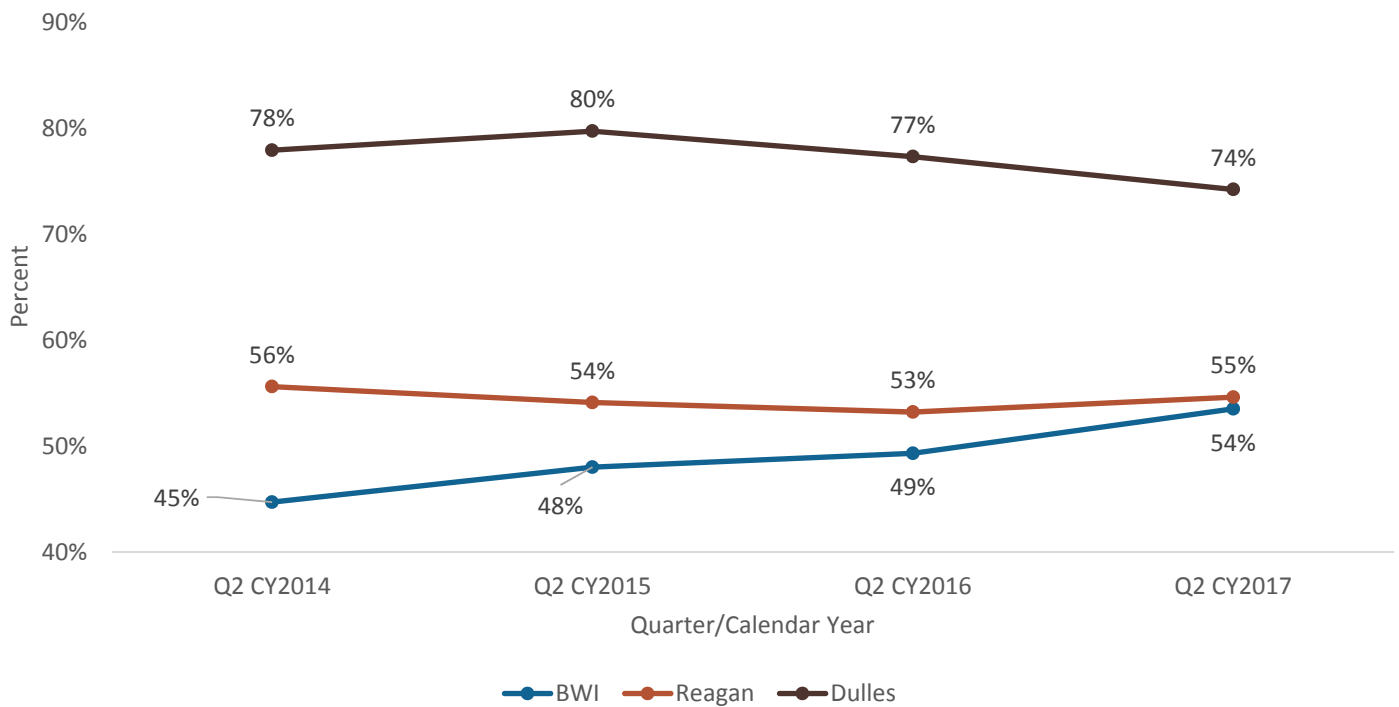
The number of nonstop destinations at an airport serves is an important performance metric, as nonstop service is preferred by passengers. Due to the seasonal nature of air travel, the way to evaluate performance is by comparing how an airport performs in a particular quarter one year compared to that same quarter in another year. Chart 10.9B.1 demonstrates that BWI Marshall has produced a steady increase in nonstop destinations in the fourth quarter of the calendar year from 2014 to 2016. The number of nonstop destinations grew to 52 percent of all markets served by the region's three airports in Q4 2016 compared to 46 percent of all markets served in Q4 2014. Today, BWI Marshall provides more than 300 daily nonstop departures and nonstop service to more than 80 domestic and international destinations.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.9B

Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

Chart 10.9B.1: Percent of Nonstop Markets Served Relative to Benchmark Airports in Q2 CY2014-CY2017



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Jack Cahalan  
*Maryland Aviation Administration (MAA)*

## PURPOSE OF MEASURE:

To determine market share in Baltimore/Washington region by tracking number of passengers and departing flights at BWI Marshall compared to other airports in the region.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Air service schedule analysis.

## NATIONAL BENCHMARK:

Reagan National Airport; Dulles International Airport.

## PERFORMANCE MEASURE 10.9C

### Market Share: Percent of Passengers and Departing Flights Relative to Benchmark Airports

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 25 million passengers flew through BWI Marshall Airport in 2016, an all-time-record for passenger traffic. In fact, BWI Marshall has posted 18-straight monthly passenger records through December 2016. International passenger traffic reached 1,233,466 million passengers in 2016, also a new record, and 2016 was the second-straight year with more than one million international passengers.

Due to the seasonal nature of air service schedules, the most valid way to track service performance is a comparison of identical quarters in prior calendar years. As seen in the following charts, BWI Marshall Airport's percentage of departing flights steadily increased between the fourth quarter of 2014 and the same time-period in 2016. This positive performance is due primarily to continued growth by Southwest, jetBlue, Spirit and Allegiant Airlines in 2016. In the fourth quarter of 2016, BWI Marshall Airport served more passengers than any other airport in the region.

BWI is first in market share of passengers and third in market share of number of departing flights. This is because Reagan National handles a great deal of commuter flights which use smaller aircraft and carry fewer passengers. This fact results in a larger number of overall departures at Reagan than BWI Marshall. This "commuter factor" is also present, to a lesser degree, at Dulles.

By contrast, BWI Marshall handles relatively few commuter flights. The overwhelming majority of flights at BWI Marshall involve regularly scheduled, longer distance flights using standard size commercial aircraft like the Boeing 737 flown by Southwest Airlines, which is responsible for 70 percent of the traffic at BWI Marshall. As an example, a commuter jet may carry 50 passengers where a 737-800 model aircraft flown by Southwest will carry 175.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.9C

Market Share: Percent of Passengers and Departing Flights Relative to Benchmark Airports

Chart 10.9C.1: Percent Total Daily Departures at the Region's Airports Q2 CY2014-CY2017

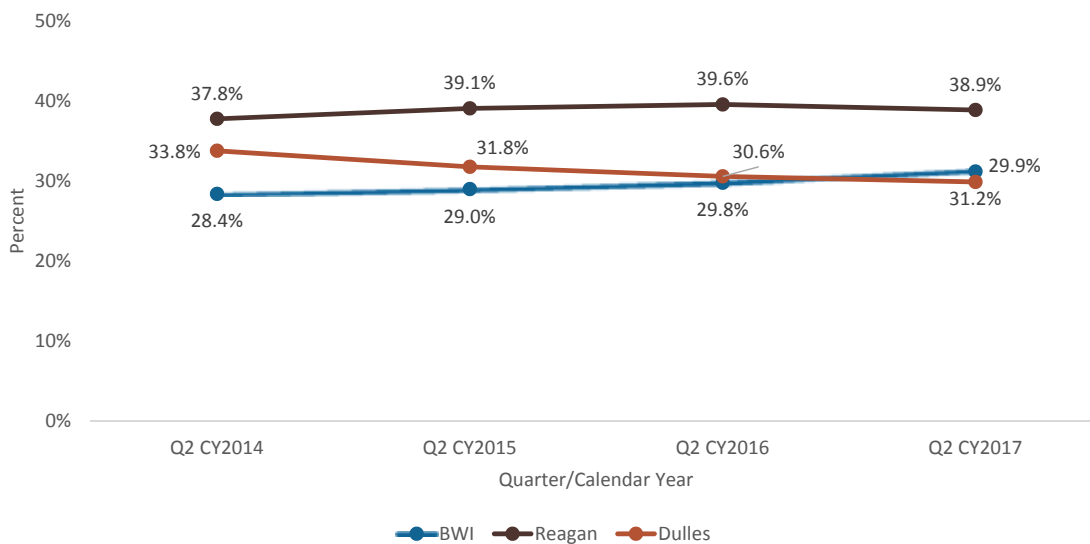
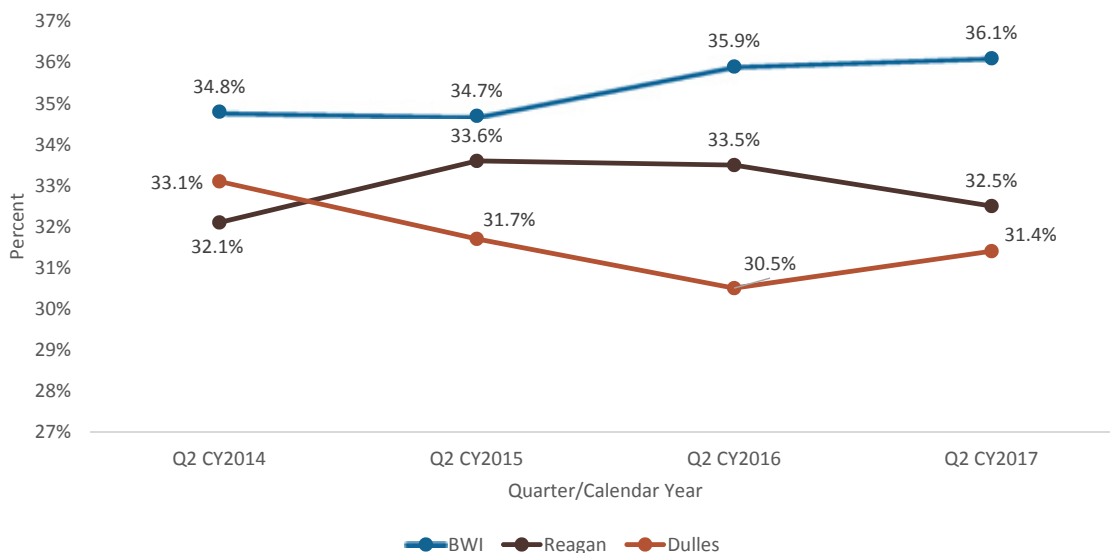


Chart 10.9C.2: Percent Total Passengers Served by the Regions Airport's Q2 CY2014-CY2017



# Facilitate Economic Opportunity in Maryland

## TANGIBLE RESULT DRIVER:

Jim Dwyer  
*Maryland Port Administration (MPA)*

## PERFORMANCE MEASURE DRIVER:

Glen Carter  
*The Secretary's Office (TSO)*

## PURPOSE OF MEASURE:

To improve customer service with a predictable, consistent and transparent process for obtaining an access permit for development in Maryland.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Reviews, permits and delivery times are tracked in the Access Management Database.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 10.10

### Percent of Roadway Access Permits Issued within 21 Days or Less

Access permits help promote safe and efficient roads for travel while supporting economic development and growth in jobs and businesses. The issuance of access permits, and the resulting construction of roadway and entrance improvements by developers, are some of the last steps before opening a business or selling commercial or residential properties for occupancy. This activity contributes to the creation of new jobs, businesses and development/redevelopment opportunities.

This measure tracks MDOT-SHA efforts to improve customer service with a predictable, consistent and transparent process for obtaining an access permit. The performance target is 100 percent of permits are issued within 21 days (after receipt of a complete application package). On average over the last five years, 105-125 completed applications are received each year.

Ongoing practices include:

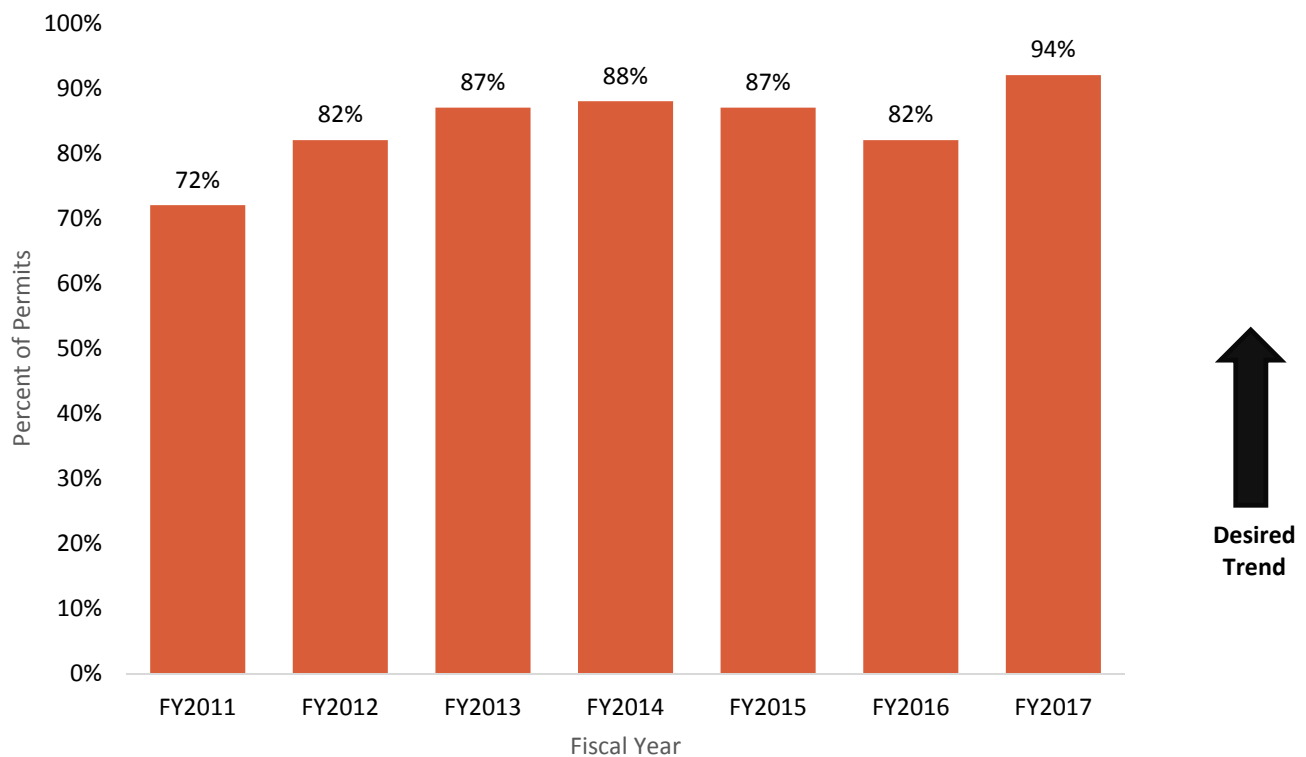
- Meeting with stakeholders in working group to establish clear expectations;
- Weekly project status alerts to the District Access Management Team.

# Facilitate Economic Opportunity in Maryland

## PERFORMANCE MEASURE 10.10

### Percent of Roadway Access Permits Issued within 21 Days or Less

Chart 10.10.1: Percent of Permits Issued Within 21 Days FY2011-FY2017



## PERFORMANCE MEASURE 10.10

### Percent of Roadway Access Permits Issued within 21 Days or Less

Chart 10.10.2: Percent of Permits Issued Within 21 Days per Quarter FY2016 & FY2017

